

WHITTINGTON & NEWBOLD  
URBAN DISTRICT COUNCIL.



REPORT  
OF THE  
MEDICAL OFFICER OF HEALTH  
FOR THE  
Year 1913.



CHESTERFIELD  
WILFRED EDMUNDS, LTD., PRINTERS, STATION ROAD.

# Index of Contents.



ACTS OF PARLIAMENT		NOTIFICATION OF BIRTHS	
ADOPTED ... ..	20	ACT ... ..	36
AGES AT DEATH ... ..	40	OCCUPATIONS OF	
ASSESSABLE VALUE .. ..	6	INHABITANTS ... ..	8
BACTERIOLOGICAL		OCCUPATION MORTALITY ...	44
EXAMINATIONS ... ..	22	OFFENSIVE TRADES ... ..	13
BIRTHS ... ..	38	PHYSICAL FEATURES OF	
CANCER ... ..	43	DISTRICT ... ..	7
CLOSET ACCOMMODATION ...	10	PHTHISIS ... ..	25
DAIRIES, COWSHEDS, AND		POOR LAW RELIEF ... ..	9
MILKSHOPS ... ..	14	POPULATION ... ..	8
DEATHS ... ..	40	PUERPERAL FEVER ... ..	24
DIPHTHERIA ... ..	23	RESPIRATORY DISEASES ...	42
EPIDEMIC DISEASE ... ..	41	RIVER POLLUTION ... ..	10
ERYSIPELAS ... ..	24	SANITARY ADMINISTRATION	18
FACTORY AND WORKSHOPS ...	16	SANITARY CONVENIENCES ...	10
FOOD ... ..	14	SANITARY INSPECTOR'S	
HOSPITAL ACCOMMODATION...	19	REPORT ... ..	12
HOUSING ... ..	15	SCAVENGING ... ..	10
ILLEGITIMACY ... ..	40	SCARLET FEVER ... ..	22
INFANTILE MORTALITY ... ..	32	SCHOOLS ... ..	13
INFECTIOUS DISEASES ... ..	20	SEWAGE DISPOSAL ... ..	10
ISOLATION HOSPITAL ... ..	19	SLAUGHTER-HOUSES ... ..	14
MEASLES ... ..	24	TUBERCULOSIS... ..	25
MIDWIVES ... ..	32	VITAL STATISTICS ... ..	38
MILK ... ..	14	WATER SUPPLY ... ..	9
NATURAL AND SOCIAL		WHOOPING COUGH ... ..	25
CONDITIONS ... ..	7	ZYMOTIC DISEASE ... ..	41



# Whittington and Newbold Urban District Council.

---

## THE COUNCIL:

Mr. J. H. GREEN, J.P. (Chairman).

Mr. JOHNSON PEARSON, J.P. (Vice-Chairman).

Messrs. W. ALLEN, W. BRACE, F. DAVIS, G. DODD,  
W. F. FROST, G. GRAHAM, J. HOPKINSON, G. ORWIN,  
H. PILKINGTON, T. D. SIMS, A. B. SHORT and  
W. STATON.

## PUBLIC HEALTH COMMITTEE:

THE WHOLE OF THE MEMBERS OF THE COUNCIL.

## OFFICIALS OF THE COUNCIL:

Clerk: H. J. WATSON, A.C.A.

Medical Officer of Health:

W. D. CARRUTHERS, M.B., M.R.C.S., D.P.H.

Sanitary Inspector:

STEPHEN J. LAVER, C.S.I.

Surveyor:

BATHGATE COMB, C.E., M.I.Mun.E.

Health Visitor: Nurse PRITCHARD.

Office Clerk: DOUGLAS ALLIBAN.

# To the Chairman and Members of the Whittington and Newbold Urban District Council.

---

Gentlemen,—

I have the honour to submit to you the Annual Report on the Health of the District under your charge for the year ending December 31st, 1913.

Whilst the Report necessarily contains a repetition of many of the more permanent features of the District, yet, if comparison be made with previous ones, evidence of steady progress in many directions will be observed.

The work involved in the re-construction of the Whittington Sewage Works to enable it to deal with the sewage of the whole district has now begun.

The organisation of the scavenging of the district is almost complete. This has not been an easy matter owing to the great variation in the capacity of the several receptacles in the district. The plan adopted is to take the streets in order, but owing to the difficulty mentioned complaints are often received that ash-pits are full, so that a horse and cart is required to deal with such cases. This matter will shortly be brought to your notice.

The conversion of the privies to the water-carriage system has been steadily pushed forward during the year, though I should have liked to have been able to record a greater activity in this work. The disadvantages of allowing collections of filth to remain in close proximity to the houses are becoming known, and it was with satisfaction that I learnt recently from the Medical Officer of Health of the neighbouring Rural District that there many people refuse to take houses where these abominations exist.

Much progress has been made this year under the Housing Regulations, and the work performed becomes of increasing importance year by year as the schemes against the spread of Tuberculosis are being completed.



The necessity of enlarging the Isolation Hospital will be found discussed in the Report. This matter will shortly be reported upon to the Joint Board by Dr. Sharpe, their Medical Officer.

In the section on Tuberculosis the incidence of the disease in this district will be found discussed, and the steps that have been taken to control it are detailed, as well as those that will be taken in future when the County Scheme is completed.

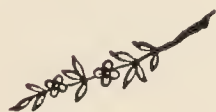
The question of Infant Mortality has received more detailed treatment in this Report than in previous ones. A record of much useful work will be noted, and the further steps that should be taken will be found discussed in detail.

In conclusion, I wish to thank the officials for the help given me, especially Mr. Laver, in compiling many of the sections of the Report, and I beg to remain,

Your obedient Servant,

W. D. CARRUTHERS,

Medical Officer of Health.



GENERAL STATISTICS.

Area of the Combined District in acres :—

Land	...	...	...	4,161
Water	...	...	...	18
				-----
Total	...	...	...	4,179
				-----

WARD.		Area (Approximately).	Estimated Population 1913.	Population Census 1911.
Old Whittington		1431	3948	3892
New Whittington		427	3789	3609
Whittington Moor		262	3751	3573
Newbold Moor		564	4827	4753
Newbold		1495	1441	1386

Total Population estimated to the middle of the year ...17,756.

Assessable Value of the District ... £33,452 18s. 6d.

Product of 1d. Rate approximately ... £138 4s. 0d.

SUMMARY OF VITAL STATISTICS.

		1913.	1912.	1911.	England and Wales 1913.
Birth and Death Rates per 1,000 of Population.	Birth Rate	29·5	30·4	30·2	23·9
	Standardized Death Rate	14·29	11·92	18·6	13·4
	Diphtheria and Croup	0·11	0	0·34	
	Enteric Fever	0	0	0·28	
	Diarrhœa	0·45	0·4	2·02	
	Phthisis	0·84	0·62	0·52	
	Other Tuberculo's Diseases	0·28	0·28	0·4	
	Cancer	0·62	0·68	0·86	
	Respiratory	2·4	2·5	4·04	
Infantile Death Rate per 1,000 Births		133·5	82·7	193·1	109

# Annual Report

## OF THE

# Medical Officer of Health

### For the Year 1913.

---

#### A. Natural and Social Conditions of the District.

1. The Urban District of Whittington and Newbold lies in the North-Eastern Division of Derbyshire, on the watershed of the River Rother. On the south it is continuous with the Borough of Chesterfield, in the south-west it lies against the Brampton and Walton Urban District, elsewhere it is surrounded by the Chesterfield Rural District.

The District is four miles long from Holme Farm at the south-west corner to the Handley Road on the north-east. The broadest portion is  $2\frac{3}{4}$  miles in extent from Routhpiece Wood on the north-west border to Stonegravels on the south-east.

The elevation of the District above the sea-level varies from 600 to 200 feet. It is highest in the most northern part, along the western border the height gradually sinks from 500 to 480 feet. From these boundaries the ground gradually slopes towards the river on the east border.

The geological formation is that of the coal measures: the sub-soil is chiefly clay. Several coal pits exist in the District; at the present time only four are working.

The area of the District is 4,179 acres, 18 of which are water.

The District is divided into five Wards:—No. 1. The Old Whittington Ward, 1,431 acres in area, lies between No. 2, the New Whittington Ward, of 427 acres, at the north-east corner of the District, and No. 3, the Whittington Moor Ward, on the south-east. The latter is 262 acres in extent. On the west side of this Ward is No. 4, the Newbold Moor Ward, of 564 acres, which on its north side is continuous with the Old Whittington Ward, and on the west with No. 5, the Newbold Ward, which has an acreage of 1,495.

The estimated population in the middle of 1913 of the whole District is 17,756, divided in the various Wards thus:—

Ward.	Population.	Density per Acre.
Old Whittington ... ..	3948	2.7
New Whittington ... ..	3789	8.8
Whittington Moor ... ..	3751	14.3
Newbold Moor ... ..	4827	8.5
Newbold... ..	1441	0.9

At the Census, 1911, the figures were:—

WARD.	Population.	Number of Families.	Average No. in each Family.
Old Whittington ...	3892	834	4.7
New Whittington ...	3609	761	4.7
Whittington Moor ...	3573	698	5.1
Newbold Moor ... ..	4753	966	4.9
Newbold ... ..	1386	317	4.3

Total Population, Census, 1911, 17,213.

## 2. Occupation of the Inhabitants.

In last year's Report a table taken from the Census Returns of 1911 was given, showing in detail the occupations of the inhabitants. The majority of the male members of the community work as coal miners or at the ironworks. The coal mines where they work are, with the exception of four small pits, situated outside the District. The ironworks are at Sheepbridge, within the District,



and at Barrow Hill, just outside it. Others work on the railways, the Potteries, the Waggon Works, and as agricultural labourers.

The majority of the married women are not employed in the industries of the District. Many girls work at the Potteries and some at the Jam Factory; others work at dressmaking or are in domestic service. Some are employed in Chesterfield at the Box Factory and at three Potteries.

3. The amount of Poor Law Relief granted during the year ending March 31st, 1913, was £1,133 for the Parish of Whittington, and £703 for Newbold. This is £78 less than last year, when the figures were—Whittington £1,074, Newbold £840. It is to be noted that there was an increase of £59 for the Parish of Whittington, and a decrease of £137 for Newbold.

## **B. Sanitary Circumstances of the District.**

### **1. Water Supply.**

The Chesterfield Gas and Water Board supply 3,718 out of the 3,747 houses in the District. The supply is constant and of good quality. The Board are not bound to supply any part of their area that is higher than 400 feet; in this District the part that is higher than this is agricultural in character, so no inconvenience is felt.

There are only 29 houses, with an approximate population of 145, that are not supplied through the public source. Eight of these are in the Meadows; the others are scattered all over the District. These houses obtain their water from 28 deep wells and one spring, the water from which is satisfactory.

In the six months ending September, 1913, the consumption of water per head per day for the whole area supplied by the Board for a population of 73,555, was 15.9 gallons. Owing to the continued increase in the population, and the large number of water-closets that are being erected, the Board obtained Parliamentary powers in 1911 to extend their gathering ground, and the work is now being carried out.

## 2. Rivers and Streams.

In last year's Report the steps that had been taken to prevent the pollution by sewage of a stream that passes along Pottery Lane were mentioned. This involved an extension of the sewer and the connection of drains of 30 houses to it. When this was completed it was found necessary to connect those from five more houses at the other end of Pottery Lane. This has been done during the year, and the stream is now free from pollution.

## 3. Drainage and Sewerage.

A Local Government Board Inquiry was held in April to consider the scheme for dealing with the sewage of the whole District at the Whittington Sewerage Works. This was subsequently approved, and the work is now being carried out. The scheme involves the reconstruction of the old works, and when complete they will be able to deal with 360,000 gallons of sewage daily.

## 4. Closet Accommodation.

The number and character of the closets in the District at the end of the year is as follows:—

Ward.	Privies.	Pits.	Pails.	Water Closets.	Slop Closets.
Old Whittington ... ..	622	303	65	165	—
New Whittington... ..	420	234	14	237	—
Whittington Moor ... ..	403	213	9	286	4
Newbold Moor ... ..	584	317	35	129	—
Newbold ... ..	206	130	0	135	—
	<hr/> 2235	<hr/> 1197	<hr/> 123	<hr/> 952	<hr/> 4

During the year 58 pits, with 86 privies, have been demolished, and 108 water-closets built in their place. The number of pail closets has been increased from 116 to 123. These are situated at factories where the sewer is not within convenient distance.

## 5. Scavenging.

This work is done by the servants of the Council, except those pail closets that belong to property owned by the Sheepbridge

Company, who empty these themselves. In addition to the 1,197 privy pits the refuse from 167 dry ash-pits, 23 pail closets, and 579 dry ash tins has to be dealt with. The number and situation of these is as follows:—

Ward.	Dry Ash-pits. Pail Closets. Dry Ash-tins.			
Old Whittington... ..	32	...	—	81
New Whittington ... ..	40	...	4	163
Whittington Moor ... ..	39	...	9	164
Newbold Moor... ..	47	...	—	53
Newbold ... ..	9	...	—	118
	167	...	23	579

During the year the number of dry ash-pits has increased from 138 to 167, and 81 more dry ash-tins have been provided.

The dry ash-tins were removed weekly, the fixed receptacles were emptied  $3\frac{1}{4}$  times for the whole District in the year. The number of times each receptacle was cleansed in the various Wards is as follows:—

Old Whittington	just	over	3	times.
New Whittington	„	„	3	„
Whittington Moor	„	„	3	„
Newbold Moor	„	„	4	„
Newbold	„	„	$2\frac{1}{4}$	„

From these figures it will be noted that a large number of privy middens still exist. These are becoming gradually less. As they are converted to water-closets moveable ash-tins are supplied whenever possible, but owing to the number of households where an allowance of coal is provided this cannot always be done owing to the large amount of ashes that are produced. In these instances dry ash-pits have to be erected.

The refuse is disposed of on seven tips in various parts of the District, with the exception of a small proportion (119 loads in 1913) which was put on land for agricultural purposes.



In addition to this work, the Council remove trade refuse when required at a charge of 2s. 6d. per load. They also empty four cesspools attached to large houses three or four times a year.

The total cost of this work for the year is £1,170 17s. 3d., or 5s. 6d. approximately per house.

The scavenging of streets is undertaken by the Highway Department.

## 6. Sanitary Inspectors of the District.

The tabulated statement asked for by the County Council is as follows :—

	Informal Notices Served by Sanitary Inspector.	Legal Notices Served by Local Authority.	Nuisances Abated.
<i>Drainage—</i>			
No Disconnection of Waste Pipe ..	4	—	4
Defective Traps, Inlets, and Drains ..	98	3	124
Drains Obstructed .. ..	65		73
<i>Closets and Ashpits—</i>			
Insanitary Privies, Pail Closets and Ashpits .. ..	178	—	205
Additional Closet Accommodation ..	5	—	5
Conversion of Privies into W.C.'s ..	103	6	103
Conversion of Pail Closets into W.C.'s ..	—	—	—
Defective Water Closets .. ..	13	—	14
<i>Other Defects—</i>			
Paving of Courts and Yards .. ..	58	4	58
Eaves-Spouts and Down-Spouts ..	18	—	16
Urinals Defective .. ..	1	—	1
Water Supply .. ..	—	—	—
Offensive Accumulations .. ..	23	—	23
Animals improperly kept .. ..	4	—	4
Pigsties .. ..	3	—	3
Smoke Nuisances .. ..	2	—	2
Overcrowding .. ..	2	—	2
Water in Cellars .. ..	4	—	4
Foul Condition of Houses .. ..	2	—	2
Nuisances not specified above ..	76	20	85
Totals ..	659	34	728



	Number on Register.	Inspections Made.	Notices Served.	Nuisances Abated.
Dairies, Cowsheds, and Milkshops ..	56	119	5	5
Bakehouses .. .. .	8	25	1	4
Slaughterhouses .. .. .	14	124	2	6
Offensive Trades .. .. .	—	—	—	—
Common Lodging-houses .. .. .	—	—	—	—
	—	—	—	—
Totals ..	78	268	8	15

Infected Rooms Disinfected with Formic Aldehyde .. .. . 248  
 Samples of Water submitted for Examination .. .. . 1  
 Food Voluntarily Surrendered—124 doz. Tins Tomatoes, 2 Salmon, 2 Beef,  
 1 Herrings.

Other Action taken—42 inspections to food preparation places.

## 7. Premises and Occupations which can be controlled by Bye-laws or Regulations.

### 1. BY BYE-LAWS.

Slaughter-houses, 14.

Bakehouses, 8.

Offensive Trades. The only one in the District is that of fish-  
 friers. 16 persons are registered.

### 2. BY REGULATIONS.

Cowkeepers, 46.

Purveyors of milk, 10, 6 of which live in the District.

There are no lodging-houses or cellar dwellings in the District.  
 No underground sleeping rooms exist.

## 8. Schools.

There are seven Public Elementary Schools in the District.  
 The number of children on the Registers at the end of the year is  
 3,359.

All obtain their water supply from the public source. The  
 sanitary condition of the Infants' Departments is good. The  
 Mixed Schools at Whittington Moor, Old and New Whittington,  
 require extensive alterations to bring them up to modern require-

ments. This is now under consideration by the County Education Committee. The work of altering the Moor School will shortly begin, and the others will be dealt with later.

The action taken in dealing with Infectious Disease closely follows the principles laid down in the Memorandum on Closure and Exclusion from school, and as this has been given in detail in previous Reports it is unnecessary to repeat the steps that are taken. It was not found necessary to advise the closure of any of the schools or departments during the year.

The Medical Inspection of the schools is controlled by the County Education Committee, and is undertaken by your Medical Officer of Health.

## 9. Food.

### (a) Milk Supply.

There are 46 cowkeepers, and approximately 278 cows in the District. There are 10 purveyors of milk registered. Four live outside the District, but most of the cowkeepers are also milk-sellers. Most of the milk sold is produced within the District, though some comes from Cutthorpe and Chesterfield. Condensed milk is largely used in this District. During the year one cow was slaughtered under the Tuberculosis Order.

The cowsheds were inspected 119 times, and 5 notices were served, all of which related to the neglect of limewashing.

### (b) Other Foods.

There are 14 premises where foods are prepared. These have been visited 42 times by the Inspector. No articles were condemned during the year. 124 dozen tins of tomatoes, 2 tins of salmon, 2 of beef, and 1 of herrings were voluntarily surrendered.

The 14 registered slaughter-houses were inspected 124 times in the year, 2 notices were served for offensive accumulations, and 4 for neglect of limewashing. The 8 bakehouses were inspected 25 times, and in 4 instances attention had to be called to neglect of limewashing. One new bakehouse has been registered this year.

10. **Housing.**

The work done under the Housing Regulations in the various Wards of the District is shown in the following table :—

## SUMMARY OF WORK UNDER THE HOUSING REGULATIONS.

	Old Whitting- ton.	New Whitting- ton.	Whitting- ton Moor.	New- bold Moor.	Newbold.	Totals.
Number dwelling houses inspected under and for the purposes of Sec. 17 of the Act of 1909 ..	29	41	5	21	—	96
Number dwelling houses which on inspection were considered to be in a state so dangerous and injurious to health as to be unfit for human habitation ..	12	—	—	1	—	13
Number representations made to the Local Authority with a view to the making of closing orders .. ..	12	—	—	1	—	13
Number closing orders made .. ..	4	—	—	—	—	4
Number dwelling houses the defects in which were remedied without the making of closing orders .. ..	7	56	5	20	—	88
Number dwelling houses which after the making of closing orders were put into a fit state for human habitation ..	—	—	2	—	—	2
Number houses still under consideration ..	31	5	29	42	—	107
Number houses demolished .. ..	2	—	3	—	—	5
Number houses in district, Dec. 31, 1913 ..	902	797	732	989	327	3747
Number new houses erected .. ..	2	20	23	1	5	51

The chief defects found were :—

- (1) Dampness, from rising damp, driving rain, defective roofs, and rain water spouts.
- (2) Defective drainage.
- (3) Unpaved Yards.
- (4) Defective Privies.



One case of overcrowding came under notice in the year. The house so occupied was found to be in such a state that the Council made a Closing Order, which still remains in force.

Fifty-one houses were erected during the year, all for the working classes, and at the end of the year 26 were in the course of erection.

The supervision over the construction of new houses is undertaken by the Surveyor.

### 11. Workshops, Workplaces, &c.

The information required by the Home Office is set out in detail in the following tables: —

#### 1.—INSPECTION OF FACTORIES, WORKSHOPS, AND WORKPLACES.

Premises.	Number of		
	Inspec- tions.	Written Notice.	Prose- cutions.
Factories (including Factory Laundries)	65	14	—
Workshops (including Workshop Laundries) ... ..	103	7	—
Workplaces (other than Outworkers' Premises) ... ..	124	—	—
Total ... ..	292	21	—

#### 2.—DEFECTS FOUND IN FACTORIES, WORKSHOPS, AND WORKPLACES.

Particulars.	Number of Defects.			Number of Prosecu- tions.
	Found	Remedied.	Referred to H.M. Inspect'r	
Nuisances under the P.H. Acts—				
Want of Cleanliness .. ..	7	7	—	—
Other Nuisances .. ..	3	3	—	—
Sanitary accommodation { insufficient .. ..	2	1	—	—
{ unsuitable or defective .. ..	7	7	—	—
{ not separate for sexes .. ..	2	2	—	—
Total .. ..	21	20	—	—



## 3.—HOMEWORK.

Nature of Work.	Outworkers' Lists.		
	Sending twice in the year.		
	Lists.	Outworkers.	
		Con- tractors.	Work- men.
Wearing Apparel— making, &c. .. .. .	I	—	2
Total .. .. .	I	—	2

## 4.—REGISTERED WORKSHOPS.

Bakehouses .. .. .	8
Dressmakers .. .. .	8
Mineral Water .. .. .	1
Millinery.. .. .	2
Joiners .. .. .	6
Packer .. .. .	1
Jeweller .. .. .	1
Boot Repairers .. .. .	6
Printer .. .. .	1
Saddler .. .. .	1
Smiths .. .. .	5
Cabinet Maker .. .. .	1
Crate Makers .. .. .	3
Potters .. .. .	2
Wheelwright .. .. .	1
Firewood Chopper .. .. .	1
Basket Maker .. .. .	1
Tailor .. .. .	1
—	
Total number of Workshops on Register ..	50
—	

## 5.—OTHER MATTERS.

Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act.	Notified by H.M. Inspector	18
	Reports (of action taken) sent to H.M. Inspector ..	16

## C. Sanitary Administration of the District.

### 1. Staff.

The staff consists of the Medical Officer, the Inspector of Nuisances and the Health Visitor. In the last quarter of the year the Council appointed Mr Alliban, who had been helping the Surveyor in his office as part time clerk for both departments.

A summary of the work done by the Inspector has been previously given.

The Health Visitor's appointment is a joint one between the County Education Committee and the District Council. The work done for this Council is that under the Notification of Births Act and the Tuberculosis Regulations. The other duties as School Nurse and Inspector of Midwives are controlled by the County Committee. The following table is a summary of the work performed:

#### Home Visits to—

Mothers and Babies	... ..	575	}	2,266.
Midwives	... ..	40		
Consumptives	... ..	713		
Other Causes	... ..	938		
School Visits	... ..	87		

The visits made under the heading "Other Causes," were chiefly to cases of infectious disease that had been notified by the School Teachers. These visits were most numerous in the last quarter of the year owing to the large number of cases of sore throat, scarlet fever, and diphtheria. They were rendered necessary by the mild character of the scarlet fever and diphtheria cases, which resulted in many unsuspected cases occurring. The actual number of these are:—

Sore throats and contacts of scarlet fever...	269
Scarlet fever and suspected cases ... ..	103
Diphtheria and suspected cases ... ..	54
Swabs were taken from 130 cases.	

Many of these children were also seen at school, and in this way 8 were found to be actually suffering from scarlet fever and 2 from diphtheria. The other visits were in connection with cases of chicken-pox, measles and whooping cough, scabies, infantile paralysis, bronchitis, mumps, chorea and eye diseases.

## **2. Hospital Accommodation.**

There are 31 beds at the Joint Hospital at Penmore for the treatment of cases of scarlet fever, diphtheria and typhoid fever. The area served by this Hospital at the census of 1911 had a population of 56,767, which is rapidly increasing every year. In previous Reports your attention has been directed to the small size of this Hospital, and last year you were informed that an arrangement had been made with the Committee of Management of the Spital Smallpox Hospital to take the convalescent scarlet fever cases. Further action was deferred until it was known what the proposals of the County Council were for enlarging the Hospital to take certain cases of Tuberculosis. This arrangement acted satisfactorily last year because at the time of the outbreak of scarlet fever in this District practically no cases were sent from the larger area served by the Hospital, and because there were no cases of diphtheria or enteric fever from the whole of the Joint Hospital area requiring isolation. This year, however, both scarlet fever and diphtheria have been prevalent during the autumn months in Chesterfield and in this District. This has resulted in many cases being refused that should have been sent away in spite of the accommodation provided at Spital for convalescent scarlet fever cases. Then the necessity of regarding this extra accommodation as only a temporary expedient has been recently proved by the occurrence of a suspected case of smallpox, which naturally resulted in the Hospital being peremptorily emptied of its scarlet fever cases.

I understand that the proposals of the County Council for enlarging Penmore Hospital to take a limited number of cases of Tuberculosis have now been received, and it is to be hoped that the Joint Hospital Committee will take the opportunity whilst they are building of providing the extra accommodation now required for cases of scarlet fever and diphtheria.



3. The Adoptive Acts in force in the District are :—

The Private Streets Works Act, 1892.

The Public Health Act Amendment Act, 1890 (Parts 2 & 3).

The Infectious Disease (Prevention) Act, 1890.

The Public Health Act Amendment Act, 1907 (Parts 2, 3, 4 and 5).

The Notification of Births Act, 1907.

## D. Prevalence of, and Control over, Acute Infectious Diseases.

### 1. Notifiable Diseases.

In the accompanying table the number of cases of notifiable infectious disease during 1913 is given, together with those for the preceding five years.

In another further details are given of the 1913 cases, showing the monthly incidence, and the number sent to the Isolation Hospital.

In Table II. of the Local Government Board, which will be found at the end of this Report, the ages of the patients and the Wards in which they live will be seen.

### **Number of Cases of Infectious Disease notified during the last six years.**

Year.	Smallpox.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Erysipelas.	Puerperal Fever.	TOTAL.
1908	...	37	9	2	20	—	68
1909	...	90	25	6	22	—	143
1910	...	69	9	9	8	—	95
1911	...	79	17	21	12	—	129
1912	...	163	3	1	8	2	177
1913	...	195	36	—	28	1	260



**Infectious Diseases notified in 1913.**

Month.	No. SENT TO HOSPITAL.				
	Scarlet Fever.	Diph- theria.	Puerperal Feyer.	Scarlet Fever.	Diph- theria.
January ...	8	...	...	4	...
February ...	21	...	...	10	...
March ...	7	...	...	6	...
April ...	11	2	...	7	1
May ...	10	1	...	7	...
June ...	17	...	1	11	...
July ...	8	2	...	4	...
August ...	9	...	...	5	...
September ...	25	5	...	18	2
October ...	23	5	...	8	3
November ...	24	3	...	13	2
December ...	32	18	...	15	2
	<hr/> 195 <hr/>	<hr/> 36 <hr/>	<hr/> 1 <hr/>	<hr/> 108 <hr/>	<hr/> 10 <hr/>

**Action taken after Notification of Infectious Disease.**

The administrative measures in connection with the isolation of the patient, the disinfection of the premises, clothes, etc., used by him, and the exclusion from school of contacts that were mentioned in detail in last year's Report, still remain in force. In addition, however, this year further measures were necessary owing to the mildness of the diseases prevalent, which resulted in many cases remaining unrecognised, and so could not be effectively controlled. The teachers of the schools in the area where the cases were, were asked to notify us of all children who were absent on account of sore throats. In order that this information should be promptly received, the District Education Committee instructed the School Attendance Officers to report all such cases to the teachers daily. The School Nurse visited the homes of all such cases, and they were excluded from school for two weeks if any suspicious symptoms were found. The parents were advised to call in medical assistance, and all cases that were not subsequently notified were

seen by the Medical Officer at the end of a fortnight to determine if they could safely attend school. In addition the Nurse took swabs of all suspicious cases, and in every case of diphtheria of all the contacts as well.

In this way the Nurse visited 269 cases who had sore throats or had been in contact with scarlet fever patients, 103 who were suspected to be suffering from scarlet fever, and 54 from diphtheria. In her visits to the Schools she found 8 who were in the peeling stage of scarlet fever, and 2 who were proved by bacteriological examination to have diphtheria.

### **Bacteriological Aids to Diagnosis.**

Owing to the small number of specimens that were sent from this District in 1912 to the County Council Laboratory, the Council sent a circular letter to the medical men practising in the District early in the year inviting them to make greater use of the facilities offered, and at the same time stating that if desired the Health Visitor would take swabs from patients and contacts. The result of this was that 182 specimens were examined during the year. The details of these are as follows:—

Disease.	Result.	
	Positive.	Negative.
Enteric Fever... ..	0	2
Diphtheria ... ..	25	133
Phthisis ... ..	7	13
Miscellaneous ... ..	1	1
	—	—
	33	149
	—	—

**SCARLET FEVER.**—This year I have to record the largest number of cases of this disease in recent years. In the Autumn months a wave of infection of both scarlet fever and diphtheria spread over the whole country, and there were a large number of children of a susceptible age who were unprotected by a previous attack. Cases of the disease occurred in all the Wards of the District, though by far the largest number were in the Newbold

Moor Ward, where cases have occurred since the Autumn of 1911. The majority of the others were in the adjoining parts of the Whittington Moor, Old Whittington, and the Newbold Wards. There were 165 infected houses in all. Examination of the investigations made as each case was notified goes to show that the continued spread of the disease is due to personal contact; the milk supply is blameless. Fortunately the type of disease is still mild, only one death being recorded, though this factor itself made the control of the disease so difficult owing to many cases remaining unrecognised until the characteristic "peeling" had begun, so that for a considerable time infection was being spread broadcast in this way. To counteract this special measures were taken in the Autumn months, details of which have already been mentioned.

108 out of the 195 cases were removed to Penmore Hospital, that is 55.38 per cent., though more would have been sent if there had been accommodation. In last year's report I detailed the characteristics of the disease and the smallness of the houses (usually 4 rooms) which make the home treatment so very unsatisfactory, and a consideration of these will make it evident that both for the patient and the public health every case that occurs in such surroundings should be sent to the Isolation Hospital. This, however, will not be possible until the much-needed extension to it is made.

**DIPHTHERIA.**—36 cases in 30 houses were reported during the year. The majority were due to personal infection. Several cases were of a severe type; 2 ended fatally, 10 were removed to Penmore Hospital, and more would have been if there had been accommodation. Antitoxin was supplied for practically all the cases. 18 out of the 36 cases occurred in December, and investigation showed that the disease was contracted in the first instance at a school in Chesterfield. The contacts of all the cases were swabbed by the Nurse, and in this way several mild and unrecognised cases were found.

Outbreaks of scarlet fever, and especially of diphtheria, have long been associated with damp houses and the smells caused by



defective drains and middens, so that the large number of cases of these diseases that have occurred this year should stimulate the Council to press forward the conversion of privies to the water closets, the paving of back yards, and the provision of damp-proof courses in houses where required.

**ERYSIPELAS.**—28 cases were reported during the year, one of which proved fatal. 18 of these occurred between the ages of 25 and 65, and 16 of them were in the Moor Wards. As the conditions that favour the occurrence of this disease are the same as of diphtheria and scarlet fever, it is unnecessary to repeat the remarks made in that connection.

**PUERPERAL FEVER.**—1 case of this disease was notified during the year. The attention of the Supervising Authority of the Midwives was immediately drawn to this, and all action required to prevent the spread of infection was immediately taken.

## **2. The Non-notifiable Diseases.**

During the year we received information from the school teachers of the following list of suspected diseases:—Whooping cough 6, chicken-pox 13, measles 23, mumps 2. As far as the majority of these diseases are concerned the most susceptible age is passed before school life begins, and so the numbers do not indicate their prevalence. The information, however, is extremely valuable, because it enables enquiries to be made to see if the patients are being treated by a medical man, and other cases are by these visits brought under notice. The parents are advised how to prevent the spread of infection, and are urged to take precautions to minimise the onset of complications, such as pneumonia, which often prove so fatal. Leaflets for each disease are also left at the homes, which give a summary of the information given by the Nurse.

**MEASLES.**—3 deaths occurred during the year, all in children under 2 years of age. The 23 cases that were notified by the teachers attended the Whittington Moor and Edmund Street



Infant Schools. The last severe outbreak was in 1911, when 15 children died. Experience shows that this usually leaves the District free for 2 years; the deaths in 1912 were 2 and this year 3, which bears out this statement, but also means that there are an increasing number of susceptible children in the area. So we must not be surprised if this small death rate is not maintained next year.

WHOOPIING COUGH.—6 children died in 1913, all in the first half of the year. 3 were under 1 year and 3 between the ages of 2 and 5. 8 notifications were received of school children, 6 at Newbold Church of England School and 2 at Edmund Street Infant School. Last year the cases were chiefly at Newbold Moor and The Brushes area. 5 terminated fatally.

## E. Prevalence of, and Control over, Tuberculosis.

At the beginning of the year only cases of Pulmonary Tuberculosis were notifiable, but since February 1st this requirement has been in force for all forms of the disease.

### 1. Pulmonary Tuberculosis.

The following table shows the age and sex distribution of all cases on the books during the year. The Wards in which they live will be found in Table II. of the Local Government Board at the end of this Report.

#### \* Pulmonary Tuberculosis.

Age.	0—1	1—5	5—15	15—25	25—35	35—45	45—55	55—65	65 and over	All Ages
Males ..	1	..	8	15	20	13	5	3	1	66
Females	..	..	7	14	8	8	1	..	..	38
TOTAL	1	..	15	29	28	21	6	3	1	104

\* This table includes 13 males and 4 females that remained on the books from 1912. During the month of January, 1913, 5 males and 4 females were notified.

During the year 15 patients died, 10 males and 5 females. One of these cases died on January 1st, and one was not notified, so are not included in the previous table. The age periods at which the deaths occurred are shown in Table 3 of the Local Government Board at the end of the Report. In 5 instances the diagnosis was not subsequently confirmed, 3 being males and 2 females. 6 have left the District, 5 males and 1 female. At the end of the year, therefore, 80 cases remained on the books, 50 males and 30 females.

The actual treatment of the disease is undertaken by the County Council. The scheme at present is not yet complete, but throughout the year treatment has been provided at the Tuberculosis Dispensary at Chesterfield, and a certain number of cases have been sent to Sanatoria in various parts of the country, whilst shelters for suitable cases have also been provided. The details are as follows:—30 out of the 104 cases notified either refused Dispensary treatment or were in too advanced a stage to attend. At the end of the year 40 out of the 80 cases on the books were attending the Dispensary. 11 cases were sent to Sanatoria, 2 by the Guardians, the others by the County Committee. During the year 8 shelters were provided. When the County scheme is completed, it is intended that the majority of cases shall go to the Sanatorium for 6 weeks, when they will receive practical instruction in open-air methods, the disinfection of their sputa, the precautions to be taken when coughing, etc. The advanced cases will be offered treatment at the Isolation Hospitals, where they will not be a danger to others, and can enjoy medical comforts and nursing that they could not have at their own homes. Until this is possible, I am afraid the efforts that are being made to help these patients are often thwarted by the sufferers themselves. The disease usually attacks those who have reached the adult stage of life, whose habits are more or less fixed, so that when they are told that they must live an open-air life many habits have to be changed, and this often includes those of their family too. Then again, their will power is weakened by their debilitated condition, so that even if they start to carry out the instructions given them the efforts they make are not maintained. When they have lived for



some weeks with many others practising daily their new mode of life, and have found the benefit to themselves by an improvement of their health, they will be more eager to continue it when they return home.

The share taken by you in this campaign against Consumption consists in removing conditions that are unfavourable to the recovery of the patient, such as overcrowding, structural defects of the house, and the removal of any insanitary condition. Whilst you seek to protect those in contact with the patient by supplying disinfectants for the patient's use and disinfecting the rooms he has used in case of death or removal to another place.

On receipt of a notification of a case of phthisis the Nurse visits and gives printed and verbal instructions to the patient as to precautions that should be taken to prevent the spread of the disease, and when required sputum bottles and disinfectants are supplied. A report is made of the number of persons in the house and their sleeping accommodation. If any sanitary defect is noted it is reported to the Inspector of Nuisances. The cases, with the consent of the medical man attending, are sent to the Dispensary for treatment. Re-visits are made every few weeks to encourage the patient to carry out the instructions given at the first visit. The total number of visits made during the year was 713. The Nurse also finds out if those in contact with the patient are in good health; if not, and if they are not already being treated, they are invited to come for examination to the office. In this way I have examined 76, and all who presented any suspicious signs were sent to the Dispensary for treatment.

On referring to the tables it will be seen that there were 104 cases on the books last year. This gives an attack rate of 5.8 per 1000 of the population. 15 cases died, the rate per 1000 being 0.84, an increase on the previous year, when it was 0.62 per 1000. It will be seen that many more men than women were attacked, the proportion being nearly equal up to the age of 25, after which the number of males greatly preponderates. The number of deaths bears the same relation, there being 10 males to 5 females.

From Table II. of the Local Government Board the Ward distribution will be found. It will be noted that in proportion to the population the disease appears equally prevalent in all the Wards, with the exception of Newbold, where the proportion is considerably less than in the other Wards.

An examination of the Notifications shows that in 11 houses there were 2 cases of the disease, in 1 house 4, and in the remaining 78 there was one patient suffering from the disease.

The occupations were:—

	Males.		Females.
School ... ..	6	School ... ..	7
Miner ... ..	21	Housewife ... ..	20
Railway ... ..	4	Domestic servant...	4
Waggon works ...	2	Pottery ... ..	2
Iron works ... ..	8	Others ... ..	5
Pottery... ..	4		—
Labourer ... ..	10	Total ... ..	38
Others ... ..	11		
	—		
Total ... ..	66		

On referring to the Occupation Table given in last year's Report the number employed under these various heads can be found, and from this the number per 1000 attacked can be obtained.

It will be remembered that for the whole population the attack rate is 5.8 per 1000, for miners it is 12.68 per 1000, for waggon and iron workers it is 6.8 per 1000, for pottery (male) hands 11.4 per 1000.

These figures are interesting, but until more data is obtainable no general deductions should be drawn from them. If they are confirmed by those from other districts, and remain substantially the same for several years, they will not bear out, as far as coal miners are concerned, the belief of the comparative immunity of these workers.



In 88 cases I find that the general surroundings were good in 53, fair in 20, and bad in 15. The cleanliness of the premises was good in 68, fair in 17, and bad in 3. The sleeping accommodation at the first visit of the Nurse was as follows:—Separate bedroom 29, separate bed only 29, neither separate bed or bedroom 36. At the end of the year the 36 had been reduced to 11, 8 of which refused to use a shelter if provided, 1 is too ill, and 2 too young. There are 6 cases that require a shelter, and these will be provided in due course.

## 2. Other forms of Tuberculosis.

These have been notifiable since February 1st, and appended is a table showing the sex and age incidence:—

Age	0—1	1—5	5—15	15—25	25—35	All Ages
Males ..	1	3	7	3	4	18
Females	1	2	9	1	..	13
TOTAL	2	5	16	4	4	31

The Wards in which they live are shown in Table II. of the Local Government Board. It will be noted that the majority of cases were in children, and that the total number is less than one third of the cases of lung disease. During the year 5 died, 2 of which were not notified, and are not included in the table, and in 3 instances the diagnosis was not confirmed, so that at the end of the year 25 cases remained on the books. The deaths, which were the same number last year, were from the following conditions:—Tuberculous meningitis 3, hip disease 1, tuberculous peritonitis 1. The death rate is 0.28 per 1000 of the population.

The majority of these cases required surgical treatment which could not be undertaken at the Dispensary. This they received at the Chesterfield and Sheffield Hospitals.

An examination of the tables given shows how universal tuberculosis is, and that no age is exempt. The majority of cases, however, are due to lung disease, and this attacks chiefly persons in early adult life. Another point is that there are nearly twice as many men as women attacked, and the death rate is in the same proportion. The disease is commonly rather chronic in its course, the duration being often 3 or 4 years. These facts show how serious this question is, for it means that the breadwinner is taken away in what should be the prime of life, often leaving a young family to be provided for, who for the last few years of his life he had often not been able to properly maintain. The disease is largely dependent upon known and remediable conditions, and if taken early enough is curable. This year for the first time you are in possession of figures which show the incidence of the disease in this District. It is to be noted that in the majority of instances (78 out of 104) only one case occurred at one time in one house. The number of cases of tuberculosis is large, but judging by the death rates in this District and of those of the country as a whole in previous years there were many more; in fact, during the last 50 years there has been a steady decline everywhere, co-incident with the advance of sanitation.

The disease, as is well known, is due to the tubercle bacillus, but this is only able to produce the disease if certain predisposing conditions exist. The latter include intemperance and debilitating causes of all kinds, the lowering effect of previous disease, as attacks of bronchitis, pneumonia, measles and whooping cough, and typhoid fever. Then a constitutional weakness may be inherited. This, it must be remembered, will not cause the disease, but if the specific germ be introduced into the body will make the sufferer more prone to fall a victim. Amongst potent debilitating influences the effects of living in damp, dark houses must be mentioned, especially if overcrowding co-exist with dirt and lack of proper ventilation. Associated with these, poverty, which usually entails lack of proper food, must not be omitted.

There are certain trades which also predispose to the occurrence of this disease, notably those that involve exposure to irritating dust and sudden changes of temperature, but these do not immediately concern us in this District.

The tubercle bacillus may enter the body by being inhaled or swallowed. Inhalation is the commonest way, though it may be taken into the body in milk or food, hence the necessity of enforcing the regulations and bye-laws made in regard to dairies, cow-sheds, milk shops, and slaughter-houses. With regard to inhalation the sufferer himself is the source of danger, if he does not observe the simple rules that are given him, when coughing and spitting. When he coughs, if he does not hold a handkerchief to his mouth millions of the bacilli escape into the air in the spray which comes from his mouth, the particles of moisture then stick on to the surrounding objects and dry, when the bacilli are blown freely about the air. If he does not use the spit bottle that is provided when he expectorates, and spits on to the floor or in the street, countless millions of the bacilli are set free in the air when the sputum dries.

I have given this brief summary of the causes which are known to cause the spread of this disease because it shows how widely the net must be cast if it is to be controlled. The part that the Council is taking in the general campaign against it has been already detailed. It is often said that tuberculosis is a disease of ignorance, and there is no doubt that education will play a leading part in combating it in the future, but what everyone should know immediately is, as far as the sufferers themselves are concerned, the treatment must be started at the earliest possible moment if they are to be cured. The disease often starts in the most insidious manner—as an attack of pleurisy, or the patient only feels run down; he knows he cannot do his work like he used to, he may have a cough, but it is only a dry hacking one, he may go hot and cold at times and feel weak. These symptoms may last for months before any more appear that really frighten him, but if he would only submit to a thorough examination at this stage his chances of cure are favourable. Previously financial reasons often caused



a man to drag on until he became physically incapable to working, but this has been largely overcome by recent legislation, and it is to be hoped that in the future aid will be sought at the commencement of the illness, not when the disease has reached a too advanced step, for it to be of much service.

## **F. Means of preventing Mortality in Child-birth and in Infancy.**

### **1. Diseases and Accidents of Pregnancy and Child-birth.**

During 1913 2 women died from post-partum hæmorrhage and 1 from Puerperal Fever.

In this District in 1913 fully three-quarters of the 521 births registered were attended by midwives. The supervision of these is undertaken by the County Council, who have appointed Nurse Pritchard to do the routine inspection work. There are 11 women on the midwives' roll, 3 certified and 8 not, but 3 of the latter do not practice. During the year the County Authority granted a scholarship to a pupil who lives at New Whittington. She is now completing her training, and when certificated will practice at her home.

### **2. Infant Mortality.**

	1911.	1912.	1913.
Number of deaths under 1 year ... ..	101	44	70
Infant Mortality (per 1,000 births) ...	193.1	83.6	133.5
England and Wales ...	130	95	109

The figures given in this table show such variations from year to year that a somewhat detailed explanation becomes necessary. To begin with it must be stated that the whole problem is a complicated one, for so many factors contribute to the results obtained. These can be divided into (1) The educational equipment of the parents, which, even if fairly good, may be practically nullified by poverty and bad sanitation of the home and its surroundings. (2) The prevailing climatic conditions. The variations of climate

directly influence many of the more easily preventible causes of death, notably those from diarrhoea, respiratory and infectious diseases. A hot, dry summer favours the incidence of diarrhoea, whilst a period in which rapid changes of temperature and humidity occurs favours the onset of respiratory disorders, and to some extent infectious diseases as well. It may be remarked that if this be the case why are these diseases called preventable. This is readily explained, for outbreaks of diarrhoea are practically always associated with an insanitary condition of the home and its surroundings. If they be removed, and if the mother's knowledge is sufficient to keep the house in a cleanly state, and this includes the infant's food as well, the disease can be well controlled. As far as respiratory diseases are concerned, carelessness and ignorance of how the child should be clothed on the mother's part renders it an easy prey for these disorders. The last remarks also apply to infectious diseases, with the addition of the ignorance of the mother of the need of taking precautions to prevent the child being brought in contact with cases of infectious disease.

It must be added that although the factors just mentioned act most potently during the first year of life, yet their influence continues during the early years of childhood, though to a less extent. An examination of the death returns shows that in any given year the total deaths between the ages of 1 and 5 are practically half those that actually took place during the first year of life.

In the following table the causes of death are grouped together for the last three years, and the figures shown are the number of deaths per 1,000 births, so that they can be readily compared.

Cause of Death.		1911.	1912.	1913.
Developmental Diseases ..	49.7	87.9	32.0	55.3
Meningitis and Convulsions ..	24.8		20.6	28.6
Miscellaneous ..	13.4		5.6	5.7
Diarrhoeal Diseases ..	53.5	105.2	9.4	11.5
Respiratory ..	32.5		9.4	23.0
Infectious ..	11.5		3.8	9.4
Tuberculous ..	7.7		1.9	..
Infantile Death Rate..	193.1		82.7	133.5

### Number of Deaths during 1913 grouped in Wards.

	Ward 1.	Ward 2.	Ward 3.	Ward 4.	Ward 5.	TOTAL
Developmental Diseases .. ..	5	5	12	5	2	29
Meningitis and Convulsions ..	4	1	8	2	..	15
Miscellaneous .. ..	..	1	2	..	..	3
Diarrhoeal Diseases } Preventable	1	2	2	..	1	6
Respiratory ..	4	4	1	3	..	12
Infectious ..	..	2	2	1	..	5
TOTAL .. ..	14	15	27	11	3	70

The effect of climate upon the preventable group of diseases is well shown. During the hot, dry summer of 1911 the diarrhoeal death rate was very high, and also the respiratory as well, the latter being to a large extent due to exposure without proper clothing. In 1912, which was uniformly cold and wet, both death rates fell considerably. In 1913 the effects of the changeable climate experienced is shown in the increase of the respiratory death rate.

In making these comparisons the effect of climate is emphasised because the other chief factors, insanitation and bad mothering, remain for these purposes the same in the three years under review. This I say without wishing to discount the steps that have been taken to alleviate these conditions, because when reviewing these for the whole District the efforts that have been made must necessarily be small in such a short time.

The steps that have been taken are (1) Educational and (2) Sanitary. Both are equally important, and the lack of one factor will nullify the good done by the other. Whilst both will have to be in operation for a number of years before much effect can be observed. As the Council are aware the County Education Committee have introduced the subject of Home Management for elder girls in the schools in the District, whilst continuation classes have been formed for those who have left. By these means it is hoped



that these girls, when they have homes of their own, will be better equipped than many are at the present time to perform the duties that will fall to their lot. The Council, by adopting the Notification of Births Act and appointing a Health Visitor to follow up the cases so notified, have made a most important step towards overcoming the ignorance of many of the present generation, which results in the deaths of so many infants. The details of the work done will be given in the next section of the Report. At the present moment, however, I must point out that the amount of work done must be amplified considerably if much real good is to result. The Health Visitor has been well received everywhere, but owing to her many other duties, which are detailed under the heading of Sanitary Administration, she has been unable to visit the cases frequently enough. The consequence has been that in many cases the instructions which have been given have only been carried out for a short time, with, of course, the expected result. I feel that if the Council are to obtain the favourable results that other Districts have done they must consider the advisability of extending this work so that frequent re-visits can be made to the cases that require them, and the interest of the mothers must be further aroused by starting a "Mothers' Welcome," at which the mothers can come and obtain in an informal way advice and help in the management of their babies. These institutions have been in existence for a long time in nearly all the larger towns in this country with extremely satisfactory results. If this is to be done the duties that the Health Visitor now performs will have to be re-arranged, and I hope the Committee will carefully go into this matter to see if the present arrangement that they have with the County Committee can be varied. Under the present scheme the Health Visitor undertakes the home visiting of the cases of Tuberculosis, and this work has grown during the year to such an extent that more visits were paid to these cases than to those under the Notification of Births Act, the actual figures being 713 and 575. It also appears necessary that the Tuberculous patients should be visited still more frequently, and as this is not now possible I hope that a large share, if not the whole of this work, will be given to another Nurse.

## Notification of Births Act, 1907.

	1st quarter	2nd quarter	3rd quarter	4th quarter	Total for 1913.
Births Notified .. .. .	131	144	133	142	550
„ Attended by Doctor .. ..	32	32	25	38	127
„ „ „ Midwives .. ..	99	112	108	104	423
Still Births .. .. .	4	5	4	4	17
Children who died within a few hours ..	3	3	3	4	13
„ „ were breast fed .. ..	83	123	78	116	400
„ „ „ bottle fed .. ..	11	5	2	5	23
„ „ „ both breast and bottle fed ..	6	3	3	2	14
„ „ „ spoon fed .. ..	1	1	1	3	6
„ „ „ required Medical Advice ..	10	5	3	3	21
Number of re-visits .. ..	..	17	19	23	59
„ found in good condition .. ..	..	16	15	20	51
„ „ „ fair „ .. ..	..	1	4	3	8
„ weighed .. ..	..	116	65	103	284
„ who were normal or above .. ..	..	101	54	100	255
„ „ „ below normal .. ..	..	15	11	3	29
Total Number of Visits .. ..	229	132	84	130	575

In the table it will be seen that 550 births were notified during the year. This figure does not correspond with that given in another part of the Report, which is the total number registered. The difference is partly due to the fact that all births have to be notified within 36 hours, whilst registration can take place at any time during the next six weeks. During the year careful comparisons have been made between these numbers. In a few cases only the births that have been registered have not been notified, but in no instance has it been found that a notified birth was not registered. Another cause of the discrepancy of the figures is that the still births have been notified, and these are not registrable.

The Health Visitor visits the home as soon as possible after notification if a midwife is in attendance, and in other cases when the doctor has ceased to attend. From the figures given it will be seen that over threequarters of the total cases are attended by midwives. At these routine visits the method of feeding is noted, and if artificial means have to be used instructions are given how this should be done, a leaflet is left which gives precise instructions how



the food should be prepared and altered during the first year of life. It will be observed that the vast majority of mothers are able to nurse their infants. In only 6 the child was not able to suckle, 4 were too feeble, and 2 had a hare lip and cleft palate. Whilst 14 mothers were only able to partly feed their infants, and 23 were quite unable to do so. In 5 out of these 37 cases unsuitable bottles were used. On the Health Visitor pointing out the danger of using these, 3 obtained a suitable kind, the remaining 2 practically refused to.

In addition to showing how the food should be prepared, instructions are given on the need for cleanliness in storing it and keeping it covered. Then the necessity, if thrush is to be avoided, of cleansing the infant's mouth after each feed is insisted upon.

It was found that most mothers put their infants to the breast whenever they cried, and were surprised to learn that they should only feed them at proper intervals if digestive troubles were to be avoided.

Advice is also given as to how diarrhoea may be avoided, the special dangers of this disorder are insisted upon, and the steps that must be taken if it should occur are mentioned. A leaflet, giving a summary of this, is also left with the mother. The condition of the child's eyes are especially noted, 5 cases of ophthalmia were found, none were being medically treated, but when this was sought, fortunately they proved amenable to treatment.

The necessity of providing a cradle for the infant to sleep in had to be insisted upon in many instances. During the year one death from suffocation by overlying occurred.

The visit is concluded by weighing the baby. In a few instances, at first, the mothers refused to allow this to be done, but opposition now is rare, and three of the midwives have provided themselves with a balance to do this.

I have given details of the nature of these visits to show how varied the instruction has to be, and therefore if this is to be followed more re-visits must be made than was possible in 1913. The



59 cases in which re-visits were made were selected from those in which the Health Visitor either found the child weakly or because she gained a general impression at her first visit that the mother would probably not attend to the various points mentioned. Nurse Pritchard feels, however, that every case should be re-visited at the end of the first month, as by this time it will be much more evident which cases require to be frequently re-visited, and in this opinion I am quite in agreement. At the first visit the method of proper feeding naturally is the chief object aimed at, whilst in the subsequent ones other subjects should be introduced, namely, matters of general hygiene, precautions that must be taken to avoid respiratory disorders and infectious disease.

### G. Vital Statistics of the District.

In the tables published in this Report, the information shown is grouped in Wards as far as possible.

Ward 1 is the Old Whittington Ward.

Ward 2 is the New Whittington Ward.

Ward 3 is the Whittington Moor Ward.

Ward 4 is the Newbold Moor Ward.

Ward 5 is the Newbold Ward.

#### **Births.**

During the year 521 births were registered in the District. There were 3 children born of parents who belong to the District outside it, so that the nett number for the year is 524. This produces a birth-rate per 1,000 of the population of 29.5. The birth-rate for England and Wales for the same period is 23.9.

On reference to Table I. of the Local Government Board, at the end of this Report, a steady decline in the birth-rate will be observed during the last six years. In the last three years the actual number born is practically the same in spite of the increase of the population of the District. On comparing the tables shown this year with those in previous Reports, it will be noted that the decline is most noted in the New Whittington Ward. It will also be seen that no illegitimate births occurred in this Ward this year, the only one which has this distinction.

During the year there were 17 still-births occurring in the practice of the registered midwives, as against 11 in 1912 and 13 in 1911.

### Births for the Year 1913.

Month.	Boys.	Girls.	Total.
January ... ..	20	18	38
February .. ...	22	20	42
March ... ..	14	19	33
April ... ..	26	24	50
May... ..	22	20	42
June ... ..	33	21	54
July ... ..	23	26	49
August ... ..	26	19	45
September ... ..	18	19	37
October ... ..	17	26	43
November ... ..	23	17	40
December ... ..	19	29	48
	<hr/> 263	<hr/> 258	<hr/> 521

### Births in Wards, 1913.

Month.	Ward 1.	Ward 2.	Ward 3.	Ward 4.	Ward 5.	Total.
January... ..	10	3	11	13	1	38
February ... ..	15	3	10	14	0	42
March ... ..	11	4	4	9	5	33
April... ..	17	4	10	14	5	50
May ... ..	10	9	7	13	3	42
June ... ..	13	12	10	13	6	54
July ... ..	6	10	16	14	3	49
August ... ..	9	5	15	13	3	45
September ... ..	10	7	8	10	2	37
October ... ..	15	7	10	11	0	43
November ... ..	10	7	7	14	2	40
December ... ..	11	10	14	11	2	48
Children belong- ing to District, but born out- side it... ..						3
	<hr/> 137	<hr/> 81	<hr/> 122	<hr/> 149	<hr/> 32	<hr/> 524

**Illegitimate Births.**

	Estimated Population.		Illegitimate Births.		
	1913.		Boys.	Girls.	Total.
Ward 1 ... ..	3948	...	2	3	5
Ward 2 ... ..	3789	...	0	0	0
Ward 3 ... ..	3751	...	1	3	4
Ward 4 ... ..	4827	...	1	5	6
Ward 5 ... ..	1441	...	0	1	1
Born Outside the District ... ..	—	...	1	2	3
Total ... ..	17756		5	14	19

**DEATHS.**

In the accompanying tables the monthly number of deaths, with their Ward and sex distribution, are shown. Two hundred and 18 deaths were registered in the District, 2 of which belonged to other Areas, whilst 29 persons belonging to this one died outside it. This brings the nett number of deaths to 245, and yields a death-rate of 13.8 per 1,000 of the population. In comparing this figure with the death-rates of other Districts a difficulty arises owing to the sex and age constitution of the populations varying considerably; to meet this the Registrar-General has supplied each District with a factor for correction; by using this the Standardized Death-rate is arrived at, which for this District in 1913 is 14.29. For England and Wales during the same period the figure is 13.4 per 1,000 living. For the 96 great towns, including London, it is 14.7. For 145 smaller towns it is 13.0 For London it is 14.2.

The causes of death are shown in Table III. of the Local Government Board. In the next table the ages of death during the last three years are shown:—

**Ages at Death.**

	1913.		1912.		1911.	
	No.	Per- centage.	No.	Per- centage.	No.	Per- centage.
In Infancy (up to 5) ...	101	41.2	64	31.84	156	50
School Age (5—15)... ..	11	4.5	10	4.97	20	6.41
Working Life (15—65).	84	34.3	64	31.84	76	24.36
Old Age (over 65) ... ..	49	20.0	63	31.35	60	19.23
Total (All Ages) ... ..	245	100.0	201	100.00	312	100.00



**Deaths for the Year 1913.**

Month.	Males.	Females.	Total.
January ... ..	17	13	30
February ... ..	10	16	26
March ... ..	9	14	23
April ... ..	8	7	15
May ... ..	11	12	23
June ... ..	5	7	12
July ... ..	6	9	15
August ... ..	8	4	12
September ... ..	14	13	27
October ... ..	8	10	18
November ... ..	6	15	21
December... ..	10	13	23
	<hr/> 112	<hr/> 133	<hr/> 245

**Deaths in Wards.**

Ward.	All Ages.	Infantile Deaths.
Old Whittington ... ..	50	14
New Whittington ... ..	50	14
Whittington Moor ... ..	68	27
Newbold Moor ... ..	59	12
Newbold ... ..	18	3
Total ... ..	<hr/> 245	<hr/> 70

It will be seen that 44 more deaths took place this year than in 1912. The increase is most marked in the period of infancy, and will be found further discussed in the section on Infant Mortality.

**ZYMOTIC DISEASES.**—This term is applied to those communicable or infectious diseases that occur in epidemics, and the death-rate from the principal zymotic diseases affords valuable evidence of sanitary condition. In the following table the figures for the last three years are shown:—

### Zymotic Diseases.

	1913.	1912.	1911.
Smallpox ... ..	0	0	0
Measles ... ..	3	2	15
Scarlet Fever... ..	1	2	2
Diphtheria ... ..	3	0	6
Whooping-cough ... ..	6	5	8
Enteric Fever ... ..	0	0	5
Diarrhœa ... ..	8	7	35
	<hr/> 21	<hr/> 16	<hr/> 71
Death-rate per 1,000 of the population ... ..	<hr/> 1.18	<hr/> 0.91	<hr/> 4.1

In making these comparisons the effect of climate must not be overlooked. This will be found further discussed under the heading of Infant Mortality.

### Respiratory Diseases.

Forty-four deaths took place in 1913, 24 being from bronchitis and 20 from pneumonia. The majority of deaths from bronchitis were at the two extremes of life. The figures for the last three years are as follows:—

	1913.	1912.	1911.
Deaths ... ..	44	44	70
Rate per 1,000 ... ..	2.4	2.5	4.04

In 1911 the high death-rate was produced by the number of deaths under 1 year of age. This was very considerably reduced in 1912, and if this reduction had been maintained at this age in 1913 the death-rate would have been still lower. The ages at death are shown in Table III. of the Local Government Board.

### Heart Disease.

There were 19 deaths from organic heart disease this year, 18 of which took place in the degenerative period of life. The figures for the last three years are:—

	1913.	1912.	1911.
Deaths ... ..	19	22	11
Rate per 1,000 ... ..	1.07	1.2	0.63

### Cancer.

Eleven deaths from malignant disease occurred in 1913. The ages at death are shown in Table III. of the Local Government Board. Seven were due to disease of the abdominal organs, 1 to cancer of the larynx, 1 of the gullet, and 2 of the breast. Nine of the 11 deaths were in women. In 1912, 9 of the 12 deaths were also in females.

The figures for the last three years are as follows:—

	1913.	1912.	1911.
Deaths ... ..	11	12	15
Rate per 1,000 ... ..	0.62	0.68	0.86
County Rate ... ..	—	0.72	0.73

The cause of this disease is still obscure, in spite of active research. If treatment is to be successful it must be obtained in the earliest possible stage of the disease. Experience has shown that women often do not seek aid until the disease is far advanced, and as the figures just given show how much more they suffer from this disease than men, the Council will be glad to hear that an effort is being made to urge them to seek advice earlier when certain symptoms show themselves. This is being done through the midwives, who are provided with leaflets couched in simple language explaining the danger of neglecting these symptoms.

### Violent Deaths.

There were 10 violent deaths during the year, as follows:—

- 1 from suffocation from overlying.
- 1 from being knocked down by a cart.
- 1 from fracture of the spine.
- 1 from ptomaine poisoning.
- 1 from a lightning stroke.
- 2 from being run over by an express train.
- 1 from falling downstairs.
- 1 from being crushed between a prop and a runaway tub.
- 1 from being crushed between railway waggons.

There were 2 suicides by drowning.



## Occupation Mortality 1913.

OCCUPATION.					MALES		FEMALES
General or Local Government of the Country	...			...	5	...	3
Defence of the Country	...	...		...			
Professional and their Subordinate Services	...			...			
Domestic Offices or Services	...	...		...			
Commercial Occupations	...	...		...			
Conveyance of Men, Goods and Messages					5	...	—
Agriculture ...					2	...	—
In and About Mines and Quarries					13	...	—
Metals, Machines, Implements and Conveyances ..				...	14	...	—
Precious Metals, Jewels, Watches, etc. ...				...			
Building and Works of Construction	...			...	3	...	—
Wood, Furniture, Fittings and Decorations				...			
Brick, Cement, Pottery and Glass	...			...	1	...	—
Chemicals, Oils, Grease, Soap, Resin, etc.				...			
Skins, Leather, Hair and Feathers	...			...			
Paper, Prints, Books and Stationary	...			...			
Textile Fabrics					—	...	—
Dress	...	...	...	...	6	...	2
Food, Tobacco, Drink and Lodging	...			...			
Gas, Water, Electricity and Sanitary Service				...			
Other, Undefined Workers and Dealers...				...			
Without Specific Occupiers or Unoccupied					21	...	65
Total					70	...	70
					—	...	—

TABLE I.—(LOCAL GOVERNMENT BOARD).

Vital Statistics of Whole District during 1913 and previous Years.

Year.	Population estimated to middle of each year.	Births.			Total Deaths Registered in District.		Transferable Deaths.		Nett Deaths belonging the District.			
		Uncorrected Number.	Nett.		Number.	Rate.	of Non-residents in the registered in the District.	of Residents not registered in the District.	Under 1 Year of age.		At all Ages.	
			Number.	Rate.					Number.	Rate per 1 000 Nett Births.	Number.	Rate.
I	2	3	4	5	6	7	8	9	10	11	12	13
1908.	16,630	668	..	40·1	221	13·2	..	..	72	107·8	..	..
1909.	16,810	599	..	35·1	261	15·5	..	..	77	128·5	..	..
1910.	17,010	590	..	34·6	215	12·6	..	..	65	110	..	..
1911.	17,284	521	523	30·2	272	15·7	0	40	101	193·1	312	18
1912.	17,463	526	532	30·4	176	10·07	2	27	44	82·7	201	11·5
1913.	17,756	521	524	29·5	218	12·2	2	29	70	133·5	245	13·8

Area of District in acres (land and in- and water) ..	} 4179	Total Population at all ages .. ..	17,213	} At Census 1911
		Number of Inhabited Houses .. ..	3,536	
		Average number of persons per house ..	4·8	

TABLE II.—(LOCAL GOVERNMENT BOARD).

**Cases of Infectious Diseases notified during the Year 1913.**

Notifiable Diseases.	Number of Cases notified.								Total cases notified in each Locality (e.g. Parish or Ward) of the District.					Total Cases removed to Hospital.
	At all ages.	At Ages—Years.							Old Whittington.	New Whittington.	Whittington Moor.	Newbold Moor.	Newbold	
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.	45 to 65.	65 and upwards.						
Small-pox .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholera (C) Plague (P) ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria (including Membranous croup) ..	36	1	10	24	..	1	..	..	6	5	6	15	4	10
Erysipelas .. .. .	28	1	..	3	2	8	10	4	7	3	8	8	2	0
Scarlet fever .. .. .	195	2	51	124	11	6	1	..	38	9	51	92	5	108
Typhus fever .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteric fever .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Relapsing fever (R)	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Continued fever (C)	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal-fever .. ..	1	..	..	..	..	1	..	..	..	..	1	..	..	..
Cerebro-spinal Meningitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Poliomyelitis .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pulmonary Tuberculosis	87	1	..	14	26	36	9	1	20	17	24	22	4	..
Other forms of Tuberculosis .. ..	31	2	5	16	4	4	..	..	10	4	8	8	1	..
TOTALS .. .. .	378	7	6	18	43	56	20	5	81	38	98	145	16	118

Isolation Hospital—Penmore Hospital, Chesterfield, controlled by the Chesterfield Joint Hospital Committee.

Total Available Beds—31.

Number of Diseases that can be concurrently treated—3.



TABLE III.—(LOCAL GOVERNMENT BOARD).

## Causes of, and Ages at Death during the Year 1913.

Causes of Death.	Nett Deaths at the subjoined ages of 'Residents' whether occurring within or without the District.									Total Deaths whether of 'Residents' or 'non-Residents' in Institutions in the District.
	All Ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and upwards.	
I	2	3	4	5	6	7	8	9	10	11
All Causes } Certified ..	239	69	16	13	11	10	30	42	48	1
} Uncertified ..	6	1	0	2	0	1	..	1	1	..
Enteric Fever .. ..	..	..	..	..	..	..	..	..	..	..
Small-pox .. ..	..	..	..	..	..	..	..	..	..	..
Measles .. ..	3	2	1	..	..	..	..	..	..	..
Scarlet Fever .. ..	1	..	..	1	..	..	..	..	..	..
Whooping Cough ..	6	3	..	3	..	..	..	..	..	..
Diphtheria and Croup ..	3	..	..	2	1	..	..	..	..	..
Influenza .. ..	..	..	..	..	..	..	..	..	..	..
Erysipelas .. ..	1	..	..	..	..	..	..	1	..	..
Phthisis (Pulmonary Tuberculosis) .. ..	15	..	..	..	2	4	6	3	..	..
Tuberculous Meningitis ..	2	..	1	..	1	..	..	..	..	1
Other Tuberculous Diseases ..	2	..	..	1	1	..	..	..	..	..
Cancer, malignant disease ..	11	..	..	..	..	..	1	7	3	..
Rheumatic Fever .. ..	1	..	..	..	..	1	..	..	..	..
Meningitis .. ..	4	1	..	..	1	..	2	..	..	..
Organic Heart Disease ..	19	..	..	..	..	..	1	11	7	..
Bronchitis .. ..	24	8	1	..	..	..	1	..	14	..
Pneumonia (all forms) ..	20	4	5	3	2	..	3	4	..	..
Other diseases of respiratory organs .. ..	..	..	..	..	..	..	..	..	..	..
Diarrhoea and Enteritis ..	8	6	2	..	..	..	..	..	..	..
Appendicitis and Typhlitis ..	..	..	..	..	..	..	..	..	..	..
Cirrhosis of Liver .. ..	..	..	..	..	..	..	..	..	..	..
Alcoholism .. ..	..	..	..	..	..	..	..	..	..	..
Nephritis & Bright's Disease ..	7	..	..	..	..	..	2	4	1	..
Puerperal Fever .. ..	1	..	..	..	..	..	1	..	..	..
Other accidents and diseases of Pregnancy & Parturition ..	2	..	..	..	..	..	2	..	..	..
Congenital Debility and Malformation, including Premature Birth ..	32	29	..	1	..	..	..	..	..	..
Violent Deaths, excluding Suicide .. ..	10	1	..	1	1	2	2	1	2	..
Suicide .. ..	1	..	..	..	..	1	..	..	..	..
Other Defined Diseases ..	70	16	6	3	2	2	9	11	21	..
Diseases, ill-defined or unknown .. ..	3	..	..	..	..	1	..	1	1	..
TOTALS .. ..	245	70	16	15	11	11	30	43	49	1

TABLE IV.—(LOCAL GOVERNMENT BOARD).

## Infant Mortality 1913.

Nett Deaths from stated causes at various Ages under 1 Year of Age.

Causes of Death.			Under 1 week.	1—2 weeks.	2—3 weeks.	3—4 weeks.	Total under 4 weeks.	4 weeks and under 3 months.	3 months and under 6 months.	6 months and under 9 months.	9 months and under 12 months.	Total Deaths under 1 year
All Causes	Certified ..	16	4	2	2	24	17	11	9	8	69	
	Uncertified ..	1	..	..	..	1	..	..	..	..	1	
Small-pox .. ..			..	..	..	..	..	..	..	..	..	
Chicken-pox .. ..			..	..	..	..	..	..	..	..	..	
Measles .. ..			..	..	..	..	..	1	..	1	2	
Scarlet fever .. ..			..	..	..	..	..	..	..	..	..	
Whooping-Cough .. ..			..	..	..	..	..	1	2	..	3	
Diphtheria and Croup .. ..			..	..	..	..	..	..	..	..	..	
Erysipelas .. ..			..	..	..	..	..	..	..	..	..	
Tuberculous Meningitis .. ..			..	..	..	..	..	..	..	..	..	
Abdominal Tuberculosis (b) .. ..			..	..	..	..	..	..	..	..	..	
Other Tuberculous Diseases .. ..			..	..	..	..	..	..	..	..	..	
Meningitis (not Tuberculous) .. ..			..	..	..	..	..	..	1	..	1	
Convulsions .. ..			2	2	1	..	5	4	2	1	2	14
Laryngitis .. ..			..	..	..	..	..	..	..	..	..	
Bronchitis .. ..			..	..	..	..	..	3	1	1	3	8
Pneumonia (all forms) .. ..			..	..	..	..	..	..	2	1	1	4
Diarrhoea .. ..			..	..	..	1	1	..	2	1	1	5
Enteritis .. ..			..	..	..	..	..	1	..	..	..	1
Gastritis .. ..			..	..	..	..	..	..	..	..	..	..
Syphilis .. ..			..	..	..	..	..	..	..	..	..	..
Rickets .. ..			..	..	..	..	..	..	..	..	..	..
Suffocation, overlying .. ..			..	..	..	..	..	..	1	..	..	1
Injury at birth .. ..			..	..	..	..	..	..	..	..	..	..
Atelectasis .. ..			..	..	..	..	..	..	..	..	..	..
Congenital Malformations(c) .. ..			2	1	..	..	3	1	..	..	..	4
Premature birth .. ..			11	1	..	..	12	..	..	..	..	12
Atrophy, Debility and Marasmus .. ..			1	..	1	1	3	8	1	1	..	13
Other Causes .. ..			1	..	..	..	1	..	..	1	..	2
TOTALS .. ..			17	4	2	2	25	17	11	9	8	70

Nett Births in the year	{	legitimate	505
		illegitimate	19

Nett Deaths in the year of {
 

legitimate infants	63
illegitimate infants	7

